

The following comment summary captures comments made during the stakeholder interviews, public workshop, and written comments submitted. This summary is not intended to be a verbatim transcript of the comments received. Information has been organized into categories in order to group comments, questions and suggestions relating to similar topics.

Topics include:

- General Vision and Need for Project
- Previous Studies
- Impacts to Properties and Businesses
- Environmental Impacts
- Relationship to Other Projects
- Multi-modal Facilities
- Public Transit
- Outreach Process and Information
- Local Circulation Issues
- Regional Circulation Issues
- Interchange Design and Operation
- Safety
- Project Schedule
- Cost and Funding
- Current Technical Studies

The project team will review all comments and identify how input will be incorporated into improvement options. All input provided will be addressed appropriately in the improvement options or in future technical studies and detailed project design.

General Vision and Need for Project

Many participants cited the need to prioritize projects and fast track smaller components of a larger Greenbrae Corridor Improvement Project. Issues related to regional and local circulation as well as multi-modal improvements were identified as priorities. Some expressed that TAM should be looking at other alternatives besides increasing capacity on Highway 101 to address congestion.

Some participants wanted to know how priorities would be evaluated. Specifically, many participants were concerned about bicycle and pedestrian safety and access throughout the corridor. The majority of participants agreed the overall operation and capacity of Highway 101, adjacent local streets, and interchanges in the area all need to be improved.

Specific Comments

- There appears to be conflicts between local traffic and regional traffic on local roads west of 101 such as Tamal Vista. Congestion issues need to be addressed through a balanced multi-modal needs perspective. Need connectivity with an integrated network of facilities for improving mobility.
- Local improvements are needed and behavioral changes need to be addressed as well. Vehicles may change but people are not going to give up their individual vehicles and the freedom that

comes with them. A lot of change and new technologies such as intelligent vehicles which can operate closer together may occur in the next 20 to 30 years so it is difficult to make projections.

- Project report should be a justification of preferred project and what deserves the level of priority/ investment made. Need to list prioritized projects which can be implemented as funding becomes available because there will never be enough money to do what we would like to do. What performance measures will be used to prioritize project elements?
- Need to recognize the capacity constraints of Highway 101 in order to develop realistic expectations and solutions. A clear process and methodology to delineate what the effects, if any, Highway 101 changes would make to local streets and roads, as well as on/off-ramps and intersections are needed. Any major initiative must insure no harm is done.
- Prioritize issues for fast tracking to include: merging improvements, further study of Bellam/I-580, Central Marin Ferry Project, congestion relief on local roads, shoulder maintenance, and bicycle/pedestrian infrastructure.
- Concerned about all or nothing mentality. Explore small projects, interim steps that could be agreed upon and implemented without much controversy. What about a three or five year program?
- Consideration should be given for a proactive effort included in the work plan to examine, identify and implement immediate actions and short range improvements including restriping, improved signal timing that recognizes ferry surge traffic, and bus only lanes on eastbound Sir Francis Drake Blvd.
- The project needs to identify several small local off freeway projects rather than one large project.
- Top priorities should include: local/regional traffic/bicycle/pedestrian/automobile safety, northbound 101 off-ramp to Sir Francis Drake, I-580/101 Interchange, Central Marin Ferry Connection.
- Project goals should articulate the potential to help draw together the two sides of Corte Madera.
- Consider gas usage constraints and price of gas in future years.
- Traditional land use/ transportation planning does not work because of trip generation where too many trips come in and go out of each jurisdiction. Traditional planning doesn't consider the regional perspective so the needed regional capacity is not available for local development (e.g. Route 4 never looked outside Contra Costa County). The project needs to look beyond the merging and weaving problems on Highway 101.
- Sir Francis Drake and Greenbrae Interchange improvements need to be included because Regional Measure 2 money should be allocated to issues and problems connected to the Richmond-San Rafael Bridge.
- Take options off the table which are not acceptable or simply not going to happen so as not to waste time studying options like closing off Madera off-ramp. If a diamond interchange at Wornum is not technically feasible then it should be dropped immediately from consideration. The Madera off-ramp will never be closed and should be dropped from further consideration as it would add additional traffic to the already gridlocked Tamal Vista.
- Uncertain why proposals are studied over and over again when there is no chance they will be constructed.

- Provide alternatives to address traffic congestion other than widening roads to accommodate more vehicles.
- The connection from westbound I-580 to northbound 101 is crucially important.
- Issues still exist regarding signal timing at the exit to the Ferry Terminal. The East Sir Francis Drake Project made a significant improvement, but it still takes seven or eight light cycles to clear everyone out of the parking lot. However, with the East Sir Francis Drake Project, the exit no longer gets gridlocked.
- Biggest concern in the Greenbrae Corridor is the Larkspur Ferry Terminal. The parking lot and ferry service is at capacity during peak periods and parking constraints, constraints on parking access and roadway access, and constraints on channel water access all limit the ability of transportation agencies to add more peak period service or peak period capacity. Additional environmental review is needed before more vessels could go into operation.
- Concerned that the scope of the Greenbrae Corridor Project is too large and it will be stalled in debate over the demand versus capacity issue on 101 which the project cannot fix.
- It appears that both the Central Marin Ferry Connection and Wornum Interchange could be affected by the outcome of this study. Need to clarify or confirm that there has been no commitment made to new Wornum Drive Interchange Option. Has there been a commitment made to the Central Ferry Connection Project?

Previous Studies

Several comments and questions were made regarding critiques of Option 4 from the May 2002 *Interim Planning Report Summary on US Highway 101 Interchange with Sir Francis Drake Boulevard*. Specifically, concerns regarding impacts from constructing a Wornum Drive Interchange and proposed removal of existing freeway ramps were expressed.

Specific Comments

- Will all of the alternatives from the Interim Study be considered again?
- Reducing ramps as proposed in Option 4 along Highway 101 could cause massive blockages and devalue freeway property resulting in less tax revenue. Option 4 seems may reduce accidents but a full interchange at Wornum and closure of Madera ramps would insure congestion on frontage roads, weaken retail access, and require more miles traveled for local residents. Removing existing ramps would redirect traffic onto local roads.
- There is already heavy traffic, especially in the evenings, on Tamal Vista and Option 4 would probably gridlock all of Tamal Vista.
- Constructing the proposed Wornum extension that would go through the wetlands whereas the current entry from the frontage road is preferable. Previous efforts studied using the old railroad right of way for a bikeway without consulting with environmentalists.
- A new Wornum Interchange would impact existing bicycle/pedestrian paths.

Impacts to Properties and Businesses

Many concerns were related to the impact of interchange improvements to businesses in the corridor. Several comments expressed the need for bicycle and pedestrian access between shopping centers. Others were concerned about potential right-of-way acquisition and impacts to properties.

Specific Comments

- Changes in intersections will affect business at the Village Mall, the Corte Madera Town Center and businesses along Tamal Vista Blvd. and Redwood Highway.
- Closing the Lucky and/or Madera ramps will result in loss of business in that area. Access to the Corte Madera Town Center at Madera versus Tamalpais is more even than it used to be, possibly 60% at Tamalpais /40% at Madera
- Some concern about the rear of the Market Place Shopping Center on Tamal Vista if impacted by a possible frontage road south of Sir Francis Drake and Wornum.
- Concerned about the ability to access businesses when Highway 101 is blocked up. Do not increase the concentration of traffic with one interchange as many businesses are in a small area.
- Improvement options should balance access to all businesses. Explore construction of a frontage road to provide access to businesses.
- Consider a foot bridge for access between the shopping centers.
- Evaluate routing and usage of recent addition of shuttles between the shopping centers so that it serves transit riders as well as shoppers.
- Concern regarding access to homes at the Greenbrae Boardwalk.
- Investigate land ownership and long term build out prospects of all lands east of the railroad right-of-way down to the southern end of the railroad tracks.
- Some buildings in the immediate area are likely to be redeveloped for housing.
- The Lazyboy Furniture Store may be interested in selling their property which could allow for construction of a free right turn or possibly a round-a-bout.
- How would improvements at I-580 affect the Bon Air Shopping Center?

Environmental Impacts

Participants were concerned about a variety of environmental impacts related to the project. Specifically, participants were interested in noise impacts, flooding, vibrations from traffic, and encroachment into wetland areas.

Specific Comments

- The top priority for the environmental groups is protecting the environmental aspects of the Bay Front.
- Provide information on noise impacts and mitigation measures to reduce these impacts.
- Residents along Tamal Vista have expressed concerns regarding vibrations from traffic and flooding issues.
- Avoiding any impacts on marshes and wetlands is a top priority. Intrusions onto wetlands for the proposed Wornum Interchange or eastern extension of Wornum should not be considered.
- Bike paths could have a negative impact on wetlands, particularly when they are wide enough to accommodate both bicyclists and pedestrians. Constructing roads and bike paths would require filling of wetlands, and it is important that the marshes are protected. Avoid filling for bikeways including on right of way owned by SMART down to Village Shopping Center.
- Concern the potential development of the 66 acres owned by the Bridge District that could be developed by SMART as a massive Transit Oriented Development and extension of rail service to the Village Shopping Center.
- What would be the impacts on the Shoreline if East Sir Francis Drake was widened? Concern about the impact of widening East Sir Francis Drake which would require a large amount of cut

and fill to widen the road to four lanes. Would BCDC permission be needed to widen East Sir Francis Drake?

- How can the capacity of the southbound on-ramp to 101 from Sir Francis Drake be increased without any negative impacts on Corte Madera Creek?

Relationship to Other Projects

Many participants were interested in the relationship of the Central Marin Ferry Project to the Greenbrae Corridor Project. Specific comments addressed the importance of the project and expressed interest in moving it forward. Other comments addressed how the HOV Lane Gap Closure Project, Cal Park Hill Project, Tamalpais Interchange Planning Study, and other local projects may affect the corridor.

Specific Comments

- Central Marin Ferry Project is important and needs to be advanced. Need to build Central Marin Ferry Connection to provide bicycle/pedestrian access that is separate from the freeway and large intersections at Sir Francis Drake/Highway 101.
- Bicycle access at the Central Marin Ferry Connection needs to be addressed by accelerating the project to connect to Calpark Tunnel. The North South Greenway will be an incredible improvement with the Cal Park Hill Tunnel and Central Marin Ferry Connection.
- The Central Marin Ferry Connection Project is almost fully funded with \$8.2 million available from Regional Measure 2, \$400,000 may be available from BCDC, and a possible contribution from the \$25 million non-motorized Pilot Program in Marin County. Would it be possible for the Advisory Committee of the Non-Motorized Pilot Program to vote to approve the Central Marin Ferry Connector Project in March before the Greenbrae Study is done in July?
- What is the before and after effect of recently completed continuous HOV lanes through Sir Francis Drake Blvd and the corridor in general?
- HOV lane policy for the Gap Closure Project should operate the new lane anytime the mixed flow lanes are congested to induce a commuting mode change.
- Acknowledge the high priority for grade separated crossing of 580/101 as identified in The Canal Plan.
- The recent improvements on East Sir Francis Drake have helped, but the back-up on Sir Francis Drake needs to be addressed
- The Ferry Project would be one of the best projects for the Non-Motorized Pilot Program because of its potential to encourage a mode shift.

Multi-modal Facilities

Many comments focused on the need for improved bicycle/pedestrian facilities across Highway 101 and along adjacent streets in the corridor. Specific comments addressed the need for enhanced and expanded interconnected bicycle/pedestrian pathways that are separated from vehicles and provide access to shopping centers.

Areas of particular concern include: Sir Francis Drake Blvd, Central Marin Ferry Connection, Wornum Pathway, Tamalpais Interchange, Tamalpais Drive at Tamal Vista, Tamal Vista Blvd., South Eliseo Drive, San Clemente Drive, Bellem/I-580 Intersection, and East Francisco Blvd.

*Specific Comments*Existing Facilities / Issues:

- The Greenbrae Corridor is a critical project as it is the intersection of the north-south Greenway and primary east-west pedestrian and bikeway.
- Need to look at accident data for bicycles and pedestrians and not just for vehicles.
- Several separate Class I bicycle facilities would be impacted by the proposed Wornum Interchange.
- It is almost impossible to cross the 101 off-ramp and on-ramp to get to the Bon Air Shopping Center at the on- and off-ramps at Bellam along Sir Francis Drake.
- There are numerous locations where bicyclists cannot activate loop detectors to trigger left turns. Cyclists would not be able to trigger left turn signals at the proposed Wornum Interchange location.
- Riding a bicycle 16 miles from Novato to San Rafael by Home Depot requires traveling through 25 stop lights.
- East Francisco lacks a shoulder and has poor pavement conditions making it dangerous for bicycle use.
- Crossing Sir Francis Drake is dangerous and improved access and safety to the Ferry Terminal is needed.
- Improvements are needed at the intersection of Andersen and East Sir Francis Drake.
- Substantial improvements are needed at the Tamalpais Interchange because it is located along an important commute and recreational route for cyclists and the current circular “cyclone” ramps for pedestrians are inconvenient/ awkward for cyclists.
- Bicycle lanes are needed on Tamalpais Drive which is the only east-west route for cyclists to cross from one side of Corte Madera to the other.
- South Eliseo Drive is a critical east-west connection that fills a gap for cyclists traveling from one segment of Corte Madera Creek path to another. Bike lanes need to be added to this roadway.
- San Clemente Drive is a heavily used corridor by both commuters and recreational riders and interchange improvements could have a negative impact on the safety of cyclists and pedestrians along this route.
- The I-580 / Bellam Interchange is very dangerous for cyclists and pedestrians as there is currently no bike facility under I-580 and bicyclists generally ride on the sidewalk under the freeway.
- There is a need for a grade separated crossing in the area of I-580/101 Interchange as well as bicycle/ pedestrian facilities along East Francisco Blvd.
- Need to recognize importance of disability access and interview Marin Center for Independent Living.
- The Greenbrae Corridor is used by serious cyclists who use the roads for basic transportation and function like vehicles. The corridor is critical because it is the nexus for north-south routes meeting east-west routes that is currently a mismatch.
- It is unlikely High School students would use their bikes. Junior High School students will use their bikes, and there has been an increase in bicycle transit lately. Grade school students (K – 4th) need to have support of parents to use bike paths beginning in 3rd grade.

Improvement Suggestions / Options:

- Suggest Class I separated facilities for less experienced and less skilled recreational cyclists, including kids and the elderly.
- Bicycle and pedestrian access, use, and safety needs should be incorporated into all street designs. Need to look at how local roads are designed.
- Explore concepts for separating bicycles from pedestrians like those at Crissy Field in San Francisco.
- Bicycle and pedestrian conflicts in Class I off road facilities are a big issue especially as these facilities become more popular.
- A new bridge over Corte Madera Creek is needed and must be wide enough to accommodate both bicyclists and pedestrians.
- Building a good bicycle/ pedestrian facility will increase usage, for example the Sandra Marker Trail in Corte Madera has become popular since it was paved in 2003.
- Westbound bicycle lanes are needed through the interchange at the Greenbrae Interchange between Sir Francis Drake and 101 as it is a key area of concern for cyclists as well as pedestrians traveling east-west along Sir Francis Drake. There should be provisions for separated pedestrian and bicycle access heading west along East Sir Francis Drake Blvd. as it approaches the 101 Sir Francis Drake overpass to connect with northbound Central Marin Ferry Connection.
- Provide a separate bicycle/pedestrian path that would connect the northbound off-ramp to Sir Francis Drake and access across the northbound off-ramp to East Sir Francis Drake Blvd.
- Elevating the southbound off-ramp from 101 to eastbound Sir Francis Drake would allow cyclists to go under the ramp as they are approaching Bon Air Shopping Center.
- Colored pavement at the on- and off-ramps would be helpful to notify motorists that bicyclists are present.
- The existing Wornum Pathway would need to be grade separated if Wornum Interchange is built.
- Maintenance of Class III bikeways is critical including the quality of the road surface, pot hole repair, and street cleaning.
- Need for bike “chevrons” on the street.
- Do not create circumstances that generate unnatural, unexpected travel movements.
- All facilities must meet ADA requirements to allow access for all users.
- Evaluate the impacts of extending the bicycle/pedestrian path out to the railroad tracks.
- Provide bicycle and pedestrian access on each side of Wornum Drive as it passes under Highway 101 from Tamal Vista to Redwood Highway. Need to improve and not negatively impact Wornum bicycle/pedestrian path.
- Provide a bicycle/pedestrian pass at Wornum under Tamal Vista and the frontage road to eliminate at grade conflicts with automobile traffic.
- Maintain pedestrian access along Tamal Vista.
- Need for separated pedestrian and bicycle path access along each side of Redwood Highway from Wornum heading north and south to the Greenbrae Boardwalk.
- A new path should be built from a north side Wornum path through Nellen Avenue.
- Regular shoulder cleaning is needed to maintain pathways.
- The path at the Sir Francis Drake southbound on-ramp to Highway 101 needs to be connected to Wornum and Tamal Vista paths on each side of Lucky Drive and from Lucky Drive down to Tamal Vista.

- Address how East Francisco bicycle/pedestrian facilities would be affected by any interchange improvements in the area.
- Concern about proposed Tamalpais or Wornum Interchange improvements affecting the bicycle lanes at Tamalpais Drive and Tamal Vista Blvd. Any proposed interchange in the area of the Wornum Pathway should maintain an off-street pathway suitable for cyclists of all ages and skill levels.
- Concern regarding bicycle and pedestrian safety at the intersection of Bellam and I-580. Review pedestrian configuration at Sir Francis Drake or Bellam for efficiency.
- Clear signage is needed guiding eastbound riders from Sir Francis Drake onto the pathway and on to the Larkspur Ferry Terminal Building.
- Improved crossings are needed in the area near the Ferry Building to allow westbound cyclists to cross and access transit as well as use the pathway to continue westbound.
- The paved shoulders between Larkspur Ferry Terminal and Andersen Drive along East Sir Francis Drake Blvd should be elevated to the status of formal bike lanes with signage and stenciling.
- South Eliseo Drive needs bike route designation combined with Shared Lane Markings.
- Concern regarding the impact of proposed interchange improvements on bicycle/pedestrian paths along San Clemente Drive.
- Provide more information about a possible pedestrian bridge over 101 connecting the shopping centers. With accessible ramps the total walk could be almost a mile and it is unlikely that many customers would use the bridge.
- Pedestrian easements on both sides of the freeway are needed.
- Need for convenient way to walk between bus pads on 101 and the Ferry Terminal due to the significant number of commuters who take the Ferry to San Francisco and bus back home or bus to San Francisco and Ferry back home.

Public Transit

Many participants commented on the need for improved and expanded transit service throughout the Greenbrae Corridor. Several comments addressed the need for improved access to the Larkspur Ferry Terminal, enhanced bus boarding facilities, reliable bus service, and additional park 'n ride facilities.

A few participants expressed support for SMART and others expressed concern regarding impacts from SMART facilities. Additional comments noted the need for transit access to the Larkspur Ferry Terminal, shopping centers, and BART.

Specific Comments

- The Corridor is difficult because there are so few options for transit. The community needs more efficient transit opportunities. Develop convenient and inviting access to public transportation. Address bus services to/from, in and around Marin County including express bus service.
- Improve bus and passenger travel times and reliability along US 101 and Sir Francis Drake Blvd.
- Transit service on Sir Francis Drake and to the Ferry is needed.
- The Lucky Drive bus pads on both sides of the freeway are very important as they provide the closest freeway access for bus patrons traveling to the: Ferry Terminal, park and ride lots in

Larkspur and Corte Madera, Redwood High School, Barnes & Noble Shopping Center, Larkspur Landing, and residents and businesses along the 101 Corridor.

- Need for bus stops and park and ride lots at every interchange along 101.
- Additional bus service is needed. Southern Marin to Marin General Hospital is the weakest link in the local transit service as it requires commuters to travel up to San Rafael Transit Center and then double back on the 29 bus to Marin General Hospital. Need a convenient connection between the north-south buses on 101 and the east-west buses on Sir Francis Drake. Need a convenient bus stop at the Greenbrae Interchange. Need a bus connection to SMART rail station at Larkspur Landing.
- Direct access to the Ferry Terminal on the express buses would be desirable but it takes too long to leave HOV lanes on 101 and travel to and from the Ferry Terminal. Direct connections to HOV lanes and a flyover to Ferry Terminal could make the Ferry Feeder buses more reliable.
- There is a market for additional ferry service from Larkspur to San Francisco but the ability to operate additional vessels during peak periods are limited by numerous constraints including: noise, waves, sensitive habitats, and homes along Corte Madera Shoreline. Currently, GGBHTD has 72 acres of property next to the Corte Madera Ecological Reserve which is used for wetland restoration as mitigation for dredging.
- Operating express buses in HOV lanes and serving bus pads along the freeway is a major challenge. Direct access ramps to HOV lanes and flyover ramps to major destinations like the Ferry Terminal would be helpful although costly.
- Improve pedestrian access to existing bus stops.
- Provide bus stops and pathways to facilitate passenger transfers between bus services operation on U.S. Highway 101 and Sir Francis Drake Blvd. and ferry services at the Larkspur Ferry Terminal.
- Improve traffic access and egress to and from the Larkspur Ferry Terminal.
- Provide pedestrian overpass north of the Tamalpais Interchange that would connect the two shopping centers and provide bus passengers a means of getting back to the same side of the street from morning to evening.
- Evaluate the performance improvement of adding exclusive express bus lanes from Bon Air Shopping Center or further upstream to Greenbrae Interchange and Highway 101.
- Provide bus stops and pathways for convenient passenger access to and from major trip destinations, such as Larkspur Landing, Redwood High School, The Village at Corte Madera, and the Town Center Shopping Complex.
- Two buses currently transport students to Eastern Corte Madera in the afternoon. There is not enough money to support a second bus to run in the morning. There is not a lot of financial support by the State and transportation funding for schools is determined in part by access and low income communities.
- Transit use seems to be affected by seasonal rains.
- Consider an I-580 Interchange connection to BART.
- Provide park-and-ride lots near bus stops including facilities at Tamalpais Interchange.
- There are park and ride lots at Drakes Landing and Bon Air Shopping Center which were made available by the City of Larkspur as a condition for development. Also, there is also a community parking lot next to the Town Park in Corte Madera totaling 100 spaces.
- There are 1600 marked parking spaces at Larkspur Ferry Terminal but there is need for more parking as the ferry parking lot is regularly at capacity on a typical weekday. The Golden Gate

Bridge Highway and Transportation District will be requesting more parking as a result of this effort.

- Larkspur and Corte Madera parking lots are being used by bus and ferry riders, but uncertain if they are being used by carpoolers.
- The park and ride lot at Drakes Landing is not well known and has excess capacity.
- The Bon Air Shopping Center park and ride lot appears to have some excess capacity but it is difficult to distinguish between the shopping center parking lot and park and ride lot.
- The park and ride lot on Anderson near the bus yard no longer exists and was not used heavily or have good bus service. Lot was primarily used for carpool users to the East Bay and now is leased out for some commercial uses with some park and ride parking available for East Bay commuters next to employee parking.
- There is not a definite plan for parking. The GGBHTD looked at a number of options for increased parking in a 1996 Study by Fehr and Peers, including a study of access to the Ferry Terminal. Additional parking management options were initially evaluated in a 2002 study but the study was not completed and the report was never publicly circulated, but the draft report could be made available for this study.
- The Marin Rod and Gun Club site has been considered a possible site for a park and ride lot for many years but is currently slated for the Vista Pointe development.
- Need to consider the cumulative impacts if SMART moves forward.
- Money would be better spent on SMART which would reduce SMART's need for bonding, increase SMART service to evenings, midday, and weekends, and increase the shuttle bus services to SMART stations.
- If SMART is rejected then the community will need to get serious about express busses and improvements to facilitate the bus service and access to bus pads such as pedestrian over crossings.
- People from Sonoma County will not be able to afford rising gas prices to commute.

Outreach Process and Information

Several participants supported the outreach effort and appreciated the information presented at the public workshop. Other participants recognized input from other participants noting the key topics discussed during the workshop and breakout groups.

Specific Comments

- The Greenbrae Project outcome will benefit from this aggressive public outreach program.
- The outreach effort should generate a plan for improvements which people really need and want that is not financially constrained.
- More support in the community will translate into more leverage in securing necessary funding.
- A comprehensive vision is needed even if the implementation is incremental.
- Feedback from participating team members has been very positive and we are optimistic that this new approach can go a long way in developing traffic solutions.
- Excellent representation by concerned community members, participating agencies, and the project team.
- Great interaction at the public workshop and a certain consensus/theme appears to be developing. A lot of great issues were cited at the public workshop.

- The project team should work with bike safety trainings and Safe Routes to School alternative routes which are linked to Health and Wellness efforts.
- Announcements regarding meetings and project information should be coordinated with existing email lists managed by local organizations.
- Senior constituency of people who have lived here for years will resist this as people are used to access.
- Suggest education to the public to not drive as much given the current trend is for one house to generate ten trips per day.
- Ensure owners/managers of the mobile home parks are included in outreach activities
- Have the people living along the Greenbrae Boardwalk and their Homeowners Association been contacted?
- Make workshop materials available for those unable to attend workshops.
- Coordinate providing a link to TAM website from the shopping centers' websites and websites for other local groups and organizations.
- Coordinate notification and project updates with local Chambers of Commerce and city/town representatives.

Local Circulation Issues

Comments regarding local circulation suggested local traffic should remain separate from regional traffic on Highway 101. Many comments highlighted the need to facilitate the connection between communities on the east and west side of Highway 101.

Other participants were concerned about local traffic congestion on adjacent roads including: Tamal Vista Blvd, Tamalpais Drive, Madera Avenue, Sir Francis Drake Blvd, Greenbrae Boardwalk, and Lucky Drive. Specifically, participants identified the need for improved local access and safety to Redwood High School, shopping centers, and neighborhoods.

Specific Comments

- Improvements should not cut off local access and local circulation just to make regional travel work better. Regional transportation planning should not disregard local land use questions beyond those of the environment and civil engineering.
- Concern regarding impacts to surface streets and businesses with the proposed interchanges. Need to separate local and freeway traffic. Create “complete” streets to facilitate local circulation that does not require using 101 to navigate within the corridor.
- Additional Highway 101 crossings area needed.
- An increasing number of drivers are going to Redwood High School. Morning, afternoon and evening traffic near Tamal Vista Blvd. are growing due to Redwood High School. Consider a direct connection from Redwood High School to the northbound Highway 101 on-ramp.
- Students come from the east side of Corte Madera and over enrollment in one school moved 125 students to another which created a need for more travel from the east side of Corte Madera. Students from Tiburon and Belvedere attend Redwood High School and get off 101 at Cost Plus, cross under the freeway, and then onto Doherty Drive to Redwood High.
- Hall Middle School principal has reported a little better traffic flow although no increase in carpooling because students have different destinations after school.

- The eastside of Tamalpais needs safety improvements for pedestrian, bicycle, and automobile traffic.
- Traffic along Tamal Vista Blvd is a problem. Closing 101 southbound Lucky Drive off-ramp will place more traffic on Tamal Vista Blvd. Diverting all the traffic from the north end of the Corte Madera Town Center to Tamal Vista would be a disaster.
- Maintain the Madera Avenue access to Highway 101.
- East Francisco Blvd should be widened. Congestion backs-up on Sir Francis Drake to southbound 101 where the road narrows to one lane. Extending Redwood Highway to Sir Francis Drake may improve local traffic circulation.
- Concern regarding the conflict with ferry passengers exiting Larkspur Landing and residents in the area.
- Construct a bridge over the Sir Francis Drake Blvd. lanes past the southbound 101 on-ramp, onto the triple merge on Sir Francis Drake, and carry to the next light to eliminate much of the merging between two of the three legs.
- Improvements have been noticed on Sir Francis Drake Blvd. since the widening project was completed. Although traffic congestion discourages use of Larkspur Landing in the afternoon. Provide three lanes rather than a left turn lane on west bound Sir Francis Drake Blvd.
- Airporter customers of the Larkspur Terminal are not allowed enough time for traffic to get to the Airporter.
- Elevated HOV lanes to move more traffic on Sir Francis Drake.
- Need for frontage road along 101 to maintain access to businesses and not impact local streets.
- Another lane is needed on Tamalpais Drive.
- Concern regarding the poor interaction in the San Clemente/ Paradise area with the two access areas at Tamalpais and Redwood Highway to Wornum.
- Traffic flow may be improved by adding two lanes with an auxiliary lane to the northbound on-ramp to Highway 101 from the Village Shopping Center.
- Consider elimination of “Lazy Boy” store at the intersection of Tamalpais Drive and San Clemente Drive.
- A bridge at Tamalpais linking the malls in Corte Madera would foster east/west pedestrian and bicycle movement relieving congestion at Tamalpais Overpass by eliminating the need for northbound 101 traffic to double back south on San Clemente to reach neighborhoods.
- Explore the possibility of obtaining right-of-way extending Wornum west behind Redwood Highway to Magnolia in Larkspur so through traffic to Ross Valley could bypass Corte Madera eliminating congestion at the Magnolia/Redwood Avenue three-way stop.
- Need to address local traffic issues crossing Corte Madera Creek. Consider new crossing over Corte Madera Creek.
- Congestion on Greenbrae Boardwalk is an issue.
- Redesign interchange from Lucky Drive to Northbound 101 to address safety issues caused by vehicle weaving to merge unsafely onto 101.
- Study the option of constructing a local bridge from Sir Francis Drake to Lucky Drive.
- To avoid southbound Highway 101 people travel through San Rafael over Wolf Grade.
- Constructing another crossing over Highway 101 is worthy of further study.
- The Corte Madera area is difficult to access.

- People have adapted and like using local interchanges. Do not restrict local access to and from the freeway. Closing Fifer off-ramp might have the least impact, but many find Fifer off-ramp convenient and do not want it closed.
- The intersection of Anderson and East Sir Francis Drake is not really available for access to the bus yard and needs to be signalized. Buses returning to the bus yard use the interchange for access to and from the bus yard on Anderson Drive.

Regional Circulation Issues

Many participants were concerned about regional traffic and capacity constraints along Highway 101. Several comments addressed the need for improved safety and reduced congestion related to the I-580/101 Interchange. In addition, participants were concerned about access to and from Highway 101 at Sir Francis Drake Blvd.

Specific Comments

- Confirm the expected impacts of the major traffic growth occurring to and from the Richmond San Rafael Bridge related to East Sir Francis Drake improvements to I-580 and/or connectivity to San Rafael Bayshore east of I-580 (Home Depot, major employment area.)
- The 101/580 Interchange is very complex for both local and regional travel. Improve connections between 580 and 101 and between Sir Francis Drake and 101. I-580 access in the evening is only one-lane. Real concern is at eastbound Sir Francis Drake to southbound 101. People also are using Sir Francis Drake from Richmond and San Rafael to go north on to Highway 101.
- The capacity of 101 will never be able handle the volume of traffic that comes from I-580. Adding two lanes of traffic from westbound I-580 to northbound 101 with one of the lanes designated as an auxiliary lane will create problems.
- To access I-580, some traffic would go north on 101 and take a direct on-ramp to eastbound I-580 and others would still travel east on East Sir Francis Drake to access I-580.
- Access to the Ferry Terminal is a major issue aggravated by the use of East Sir Francis Drake by regional traffic traveling to the Richmond-San Rafael Bridge.
- Access to the Richmond-San Rafael Bridge should be at the I-580/ 101 Interchange rather than along East Sir Francis Drake Blvd.
- The new improvement on East Sir Francis Drake has improved traffic flow in the morning from I-580 to Highway 101.
- Convert a portion of I-580 to an expressway with a street crossing at Irene with stop lights that will end expectations that commuters can get through.
- Use the large median on I-580 for an HOV lane to queue jump past traffic waiting to get onto northbound 101.
- Propose HOV lane policy to TAM for the HOV lane to be in operation anytime that mixed flow lanes are in congestion. HOV lane would encourage mode change.
- Implementing a queue jump would provide a way for buses and carpools to get to the head of the queue.
- Many employees are coming from Vallejo and Hercules.
- Enhance regional traffic circulation between I-580 and US 101 that adversely impacts bus services on East Sir Francis Drake Blvd. (Larkspur), Bellam Blvd., and Andersen Drive (San Rafael).

- The Northbound 101 and westbound I-580 merge causes congestion on 101 in central San Rafael and back-ups on I-580.
- Add two lanes on 101 to Sir Francis Drake I-580 access and congestion relief.
- Add lane to Sir Francis Drake Blvd for southbound 101 access. The Sir Francis Drake merge to southbound 101 conflicts and there is need to widen this area.
- Consider immediate improvement of signalization for traffic on the southbound 101 off-ramp to the Ferry Terminal, signalization of Sir Francis Drake Blvd back to Eliseo, and lane striping of the southbound on-ramp.
- A warning sign in Corte Madera along to warn motorists unfamiliar with the area about upcoming weaving may help. Traffic backs up over the hill waiting to exit 101 at East Blithedale, but the changeable message sign to warn drivers has helped.
- Redwood Highway backs up in the afternoon starting at 3 p.m. causing some commuters to get off early to drive up Redwood Highway to avoid Highway 101 and access westbound Sir Francis Drake.

Interchange Design and Operation

Interchange operations along Highway 101 at Sir Francis Drake, Lucky Drive, and Tamalpais Drive were also noted as problematic. In addition, participants identified issues related to weaving and merging on Highway 101 and traffic light operation along Sir Francis Drake.

Many comments addressed the need to improve interchanges along Highway 101. Specifically, participants were concerned about the I-580/Highway 101 interchange and related congestion on local streets.

Specific Comments

- Evaluate the constraints on lane additions on the Greenbrae Interchange resulting from the addition of seismic retrofit columns.
- Address on/off-ramp safety concerns.
- Maintaining the existing interchanges will keep traffic moving.
- Southbound 101 Andersen on/off ramps in San Rafael are problematic.
- The Highway 101 connection to Redwood Highway, Doherty Drive, and Larkspur is not at all intuitive.
- Widen the 101 structure over the Corte Madera Creek in conjunction to improving the I-580/101 Interchange and northbound 101 congestion.
- I-580/101 Interchange improvements may relieve traffic on Sir Francis Drake.
- Sir Francis Drake Interchange back-ups are an issue. Consider building a two lane exit from northbound 101 to Sir Francis Drake eastbound. Need for a freeway connector from westbound Sir Francis Drake to southbound 101 which could be as a flyover, but would look better as a cut and cover tunnel.
- There is limited storage capacity for vehicles on southbound off ramp from 101 at Greenbrae Interchange.
- Decisions on what to do at I-580/101 Interchange will impact solutions for the Greenbrae Interchanges. The impacts of the eastbound I-580 to southbound Highway 101 Interchange must be compared with resulting reduction in traffic on East Sir Francis Drake Blvd.

- Will the improved eastbound I-580 to southbound 101 Interchange reduce traffic loading on East Sir Francis Drake Blvd and Larkspur Landing Circle to the extent that it simplifies the design of the Greenbrae Interchange?
- Weaving at northbound 101 at Lucky Drive and Sir Francis Drake ramps is an issue. Closing the Lucky Drive on-ramp to 101 would help the operation of the Greenbrae Interchange by removing the motorists who have to get off at Sir Francis Drake in order to get on 101 northbound.
- Concern regarding the short weaves in the northbound 101 direction from Lucky Drive to Sir Francis Drake and the southbound weaving patterns.
- Tamalpais Interchange works well except during the Holidays. The Village Shopping Center shuttles employees on the weekends for three weeks during the Christmas Season from the parking lot at Redwood High School. The Corte Madera Town Center shuttles employees from Neil Cummins School during the Holiday Season.
- Eliminate freeway loop at Redwood/Tamalpais/San Clemente during periods of high traffic.
- “Supersize” the Tamalpais Interchange to include more capacity and address one of the larger interchanges.
- On-ramp traffic at Tamalpais and signal timing is an issue.
- Concern about conflicts between traffic on-ramps and bicycle pedestrian use at Tamalpais Interchange.
- Consider a partial interchange south of Tamalpais with northbound off-ramps directing traffic directly to Paradise and Tiburon with a bridge to allow greater access to the southbound on-ramp towards Mill Valley as discussed in *The Corte Madera Draft General Plan*.
- Overall ramp metering protocol issues need to be addressed.
- Provide more information on how Wornum Drive could handle all the additional traffic if the off/on-ramps are closed? The Eastern Extension of Wornum contemplated in previous study would have major impacts. It should be eliminated as an option.
- Provide more information detailing how a diamond interchange would fit on the west side of the Freeway and how an interchange at Wornum could be constructed.
- Some people support the removal of small on/off ramps and others would like them maintained. Removing some of the ramps would be consistent with the hierarchy of goals: safety, freeway operation, and convenience.
- Do not necessarily need to provide such frequent/ convenient ingress and egress to 101.
- The Madera off-ramp does not necessarily need to remain open but there needs to be workable access to the north end of shopping center and other businesses at the north end including Max’s Restaurant and the Best Western Motel.
- Include metering in operations of Highway 101 facilities.

Safety

Many participants were concerned about bicycle/pedestrian conflicts with automobile traffic particularly at intersections along Highway 101. Wornum Drive, Tamal Vista Blvd., Redwood Highway, Lucky Drive, Fifer Avenue and Bellam Blvd were specifically noted as problematic. Specific safety issues include bicycle/pedestrian pathway maintenance, free right turns at intersections, and limited designated pathways for bicycles/pedestrians. Additional safety issues related to safe access to transit services primarily at pedestrian bus boarding areas. Several

participants were also concerned about weaving and merging patterns at on/off-ramps along Highway 101.

Specific Comments

- Maintain quality of life regarding safety and the environment for those living in the area. Need to improve safety for all modes of transportation.
- What is planned or expected with respect to arterial and freeway traffic management applications, i.e. Intelligent Transportation Systems such as ramp metering, dynamic traffic signal control and coordination, school access route safety, and future transit services?
- Invest in bicycle route improvements to reduce automobile/pedestrian/bike conflicts at intersections. Concern regarding pedestrian/bicycle/automobile conflict at Redwood Highway where there is not a sidewalk.
- Need for multi-modal consideration for south-north bicycle link to improve safety. Provide complete safe pedestrian bicycle passage through the Greenway Interchange at Wornum Drive, Tamal Vista, and the Redwood Highway to allow safe connectivity.
- Safety concern for the high levels of pedestrian traffic along Tamal Vista. Need safety improvements for school traffic on Tamal Vista Blvd.
- Concern about the signs on the lane lines at the crosswalk across Tamal Vista between Wornum and Fifer that limit the use of the roadway and prevent large vehicles from safely passing bicyclists.
- Support separated crossings at the Wornum Pathway that does not require non-motorized users to cross any freeway on/off-ramp areas.
- Concern regarding bicycle and pedestrian safety at the intersection of Bellam and I-580.
- Concern about the bump in the asphalt path where the concrete bridge structure meets the southern end of the bicycle/pedestrian path of the on-ramp overpass structure over Corte Madera Creek.
- Concern about the high fence that creates a blind curve at the southern end of the bicycle/pedestrian path on the west side of the on-ramp from eastbound Sir Francis Drake Blvd. to southbound 101.
- Important to reopen the bicycle/pedestrian path on the east side of 101 to eastbound East Sir Francis Drake Blvd for safety reasons.
- Intersection improvements are needed at the intersection of Andersen Drive/East Sir Francis Drake Blvd/I-580 to protect turning cyclists and those using the bike route to/from San Quentin Village.
- Evaluate safe transit access to boarding and alighting along the corridor.
- Hazards are created by high vehicular speeds, poor geometry at on-off ramps onto 101 and at intersections, particularly those with free right turns. Tamalpais Interchange is very dangerous for bicyclists and pedestrians. Support for the proposed new bus stops at Tamalpais Interchange which are located where passengers may board or alight without having to cross the on/off ramps.
- Highway interchange improvements at Tamalpais or Wornum could have a very negative impact on the safety of cyclists and pedestrians along this route.
- Consider lane for local traffic to improve southbound weaving and safety issues between southbound Highway 101 connection and Lucky Drive.
- Crash zones are an issue that needs to be addressed.

- Concern regarding unsafe movement on the Greenbrae interchange and Richmond San Rafael Bridge.
- Sir Francis Drake Interchange Improvements for pedestrian/bicycle/automobile safety needs to be addressed.
- Close Lucky on-ramp going to northbound 101 for safety reasons.
- Consider using motion sensors to signal traffic backups to prevent accidents on the Tamalpais Interchange due to limited sight distance.
- Concern for getting kids safely to school. Parents have expressed concern about students walking to school and bicycle accidents.
- There have been a few bicycle related accidents, including two in Larkspur: (1) back road to Neil Cummins; (2) bike path from Baltimore Park to Hall Middle School.
- Larkspur safe routes to school program should be noted.
- Employees need safe access to jobs (i.e. at Magnolia).
- Project should address flooding on Lucky Drive.

Project Schedule

Participants were interested in knowing where the project will go after the consensus building activities and when the environmental review would begin.

Specific Comments

- What is the project schedule and funding availability?
- Are we in the environmental review phase?
- Will there be a cost estimate available by March?
- What will happen after the July 2007 meeting?

Cost and Funding

Some participants requested additional information on potential limitations and allocation of Regional Measure 2, Strategy 3, and TAM Measure A funds. Several suggestions were made on potential additional funding sources for various priority projects. Others wanted specific information of funding priorities and process.

Specific Comments

- Confirm if there are any limits on project elements that lack the required nexus to the Richmond San Rafael Bridge in order to secure RM-2 funds. Is there guaranteed money from the bond measure for the Greenbrae Corridor?
- If the Wornum Interchange enhances the value of lands along Redwood Highway, consider using redevelopment of these lands so that portions of the increased property values can go towards paying for infrastructure improvements.
- Address the fundamental issue of the relative importance of different aspects of the Project.
- Future reports should define the breakdown in project costs and performance measures for each key project element.
- What is the funding priority to be applied to increasing capacity of Sir Francis Drake Blvd? Is funding priority given to Sir Francis Drake Blvd eastbound and westbound from the Greenbrae Interchange, reducing congestion on local streets near the two shopping centers, or providing a north/south bikeway?

- Identify what, if any, project elements will be funded by Strategy 3, TAM Measure A funds for local and regional roads.
- Impressed by the fact that local residents were supportive to improving freeway access and reducing congestion on 101 and not spending funds on local road improvements.
- Provide cost of retaining walls (consider other similar projects in Marin service as an examples).
- The County Advisory Committee for the Non-Motorized Pilot Program will be making their funding recommendations in March 2007 before the July meeting to decide on improvements for the Greenbrae Corridor. How can you make measures work together time-wise?

Current Technical Studies

Several participants commented on technical studies that have been completed as well as those they would like to have done. A few participants requested additional bicycle counts along the corridor. Other participants requested additional traffic data, technical studies, and further definition of some of the project data presented.

Specific Comments

- Provide information on when bicycle counts were taken. Include information on Bellam/I-580 area bicycle counts. Recommend repetitive bicycle/pedestrian counts.
- Accident plots graphic was informative.
- Clarify the meaning of the traffic numbers. Unclear if numbers for fatalities/injuries are an occupant count or incident count.
- New license plate study is needed to analyze regional traffic destination for northbound 101 evening movement to the Richmond/San Rafael Bridge.
- Evaluate the constraints on lane additions on the Greenbrae Interchange resulting from the addition of seismic retrofit columns.
- What are the vehicles per day along Sir Francis Drake Blvd? Evaluate ramp metering lights on Sir Francis Drake Blvd for eastbound and westbound merging onto southbound on-ramp to 101 so that westbound traffic from the ferry arrival surge is giving priority during the surge.
- Do you model what has been done in other locations?
- What is the possibility of an elevated facility or tunnel?
- Concern regarding the capability of the traffic models used for the project.